# VERIFICATION OF STANDARDS OF CAPACITY

# Bepartment of Commerce and Cahor BUREAU OF STANDARDS Washington

BUREAU CIRCULAR No. 4

January 3, 1905.

Under the provisions of an act of Congress approved March 3, 1901, establishing the Bureau of Standards, this Bureau is authorized, among other things, to compare capacity measures used in scientific work, manufacturing, and commerce with the standards of the Government. For the present the work will be limited to capacity measures within the following limits: 1 fluid ounce to 5 gallons, ½ pint to ½ bushel, dry measure, or 1 milliliter to 10 liters, cubic-foot standards, and glass volumetric apparatus.†

### FEES.

The following schedules of fees for the verification of such apparatus have been established:

# SCHEDULE 21.—PRECISION CAPACITY STANDARDS.

(a) For work of the highest scientific precision where special precautions have to be observed and much time is required, special fees will be charged, depending upon the nature of the apparatus, the degree of precision, and the time required.

### SCHEDULE 22.—ORDINARY CAPACITY STANDARDS.

The measures covered by the following schedule are such as are used by sealers of weights and measures and manufacturers, and for the highest grade of commercial work. These should be substantial metallic measures, provided with ground-glass covers.

Measures of capacity not provided for above may also be submitted, the fees for which will depend upon the time required for the test.

REMITTANCES.—Fees should be sent with the request for test in accordance with the above schedule, and should be remitted by money order drawn to the order of the "Bureau of Standards." Delays in forwarding fees will involve corresponding delays in the return of articles tested, as the articles are held until the fees due thereon have been paid.

# SHIPPING DIRECTIONS.

Instruments should be securely packed in cases or packages which may be used in returning them to the owner. In all cases transportation charges are payable by the party desiring the test, and should be prepaid.

Address.—Articles should be addressed "Bureau of Standards, Department of Commerce and Labor, Washington, D. C." Delays incident to other forms of address will thus be avoided. Articles delivered in person or by messenger should be left at the office of the Bureau and should be accompanied by a written request for the verification.

\*Supersedes the first edition of this circular dated December 10, 1903.

<sup>†</sup>Bureau Circular No. 9 gives full details in regard to the specifications concerning glass volumetric apparatus and the methods of testing.

## CERTIFICATE.

The certificate furnished by the Bureau of Standards will contain the following data:

- (a) Description and identification marks on article.
- (b) Number of test.
- (c) Name of party for whom comparison is made.
- (d) Temperature and other conditions of the test.
- (e) Results of test.
- (f) Date of certification.
- (h) Seal of the Bureau and signature of the Director.
- (i) Special remarks where necessary.

It is the desire of the Bureau to cooperate with manufacturers, scientists, and others in bringing about more satisfactory conditions relative to weights and measures in the broader meaning of the term, and to place at the disposal of those interested such information relative to these subjects as may be in its possession.

All communications should be addressed "Bureau of Standards, Department of Commerce and Labor, Washington, D. C."

S. W. STRATTON,

Director.

Approved:

V. H. METCALF,

Secretary.

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